

**Work Order ID 70404**

Tuesday, June 07, 2011 11:37:59 AM



Page 1

Item ID: D117-762-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 6/7/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/10/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:   K  Date: 11-06-7

Tooling:

Date:           

Run Start

QC:           Date:           SPC (Y/N):           Date:           

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr

Revision Nbr

D3492

C

D3582

Rev A

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile &amp; type labels per PPP D117-762-041 CHG001

N/A   J  

120

0.00



BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

Bend tube as per program D3582 on CNC Bender and Dwg D3582. Folio 3,  
use bending aid DT9632.  
2- cut fwd end of tube as per dwg  >     J   11-6-8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 	Skidtubes	0.00							
Skidtubes	<b>Memo</b>	0.00							
Skidtubes	1-Cut Aft end using DT8185								
	2-Deburr ends								
	3-Drill Aft Cap holes using DT8678 ***DO NOT OPEN AFT CAP HOLE***								
	4-Locate DT 8973 & Drill Ground wire hole on top of Tube.								
	5-Install 3/16 cleco in Ground wire hole ,then drill all X-Bolt holes using 3/16" drill.								
	6-Drill pilot holes for wearplates using DT8974								
	7-Open wearplate holes to Ø19/64" (0.297") as per Dwg D3582.								
	8- open ground wear holes to 0.391" as per section B-B								
	9-Open Aft Cap holes using .209" drill.								
	10-Drill pilot holes for section D-D and E-E. Holes must be laid out by hand. Mark out Center line and make sure that 6.65 and 5.906 measurements are respected. Double check before drilling, do not open holes to finish size.								



11-6-15

BB 11/06/20

W/O:		WORK ORDER CHANGES					
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Run Start

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140  Skidtubes	Skidtubes	0.00							
Skidtubes	Memo	0.00							
Skidtubes	1-Weld fwd cap D2964 per dwg D3582 and QSI 004 A/R AL ROD Batch: <u>m112860 / m117456</u> 2-Grind flush								
150  QC	QC10- Inspect visual per QSI004- ground welds	0.00							
Quality Control	Memo	0.00							
160  QC	QC5- Inspect part completeness to step on W/O	0.00							
Quality Control	Memo	0.00							

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00  0.00				x1			PL 11/06/21
180  QC Quality Control	QC3- Inspect Part Finish  Memo	0.00  0.00				1	0		BE 11/06/21

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Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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190

0.00



Skidtubes

Skidtubes

Memo

0.00

1-Open X-Bolt holes to finish size as per Dwg D3582, all sections

2-Counter Sink X-BOLT holes as per Dwg D3582

3-Deburr and blow out chips from inside of tube, prep. tube for welding.

4-Bond web as per Dwg D3582 & QSI 015

A/R 241 Sike Flex Batch: 116945  
Exp Date: 12-1-15

5-Weld x-bolt spacers(D2973) as per Dwg D3582 section B-B.

A/R AL ROD Batch: 1112860

6-Grind welds flush

*BE 11/06/21*  
*BE 11/06/22*  
*11/06/22*

200

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

*8/11/06/22*

W/O:		WORK ORDER CHANGES					
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Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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210



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0 u/06/22

Memo

0.00

215



HandFinish

Hand Finishing

Pressure Wash per QSI005 4.3

0.00

Memo

Touch-up alodine as per QSI

0.00

1 BL 11-6-22.

220



Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Memo

START TIME

OVEN TEMPERATURE:

FINISH TIME:

1:15  
320 OF  
1:45

0.00

1X Ø M-11/06/22

M116964

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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230

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1 0 12 1106127

240

HandFinishing

0.00



HandFinish

Memo

0.00

Hand Finishing

Install Wearplate &amp; Ground Wire inserts as per Dwg D3582.

1 0 12 1106122

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QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250  HandFinish Hand Finishing	HandFinishing  Memo ✓ 1-Inspect for Foreign objects  ✓ 2-Install Aft cap as per Dwg D3582, Detail "C" A/R 241 Sika Flex Batch: <u>M117516</u> Exp Date: <u>15/06/11</u>  ✓ 3-Install Wearplates as per Dwg D3582 , Note: Install Bolt and washer on Ground Wire inserts on top of tube see section D-D of dwg D3582 *****Do not install bolts where indicated on Dwg(Note #6)***** A/R 241 Sika Flex Batch: <u>M117516</u> Exp Date: <u>15/06/11</u>  ✓ 4-assemble o'ring as per dwg D3492 and apply o'ring lube A/R 55-o'ring lube batch: <u>M114189</u>  ✓ 5- Wing Walk as per Dwg D3582 and QSI 005 4.4 <u>M117863</u>	0.00  0.00				<u>1</u>	<u>0</u>	<u>40</u>	<u>u/06/23</u>
260  QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00  0.00							<u>0 u/06/23</u>

W/O:		WORK ORDER CHANGES					
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QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270 	Packaging	0.00							
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D117-762-041 Location: PPP Rev: <u>PPA 76273</u>								
280 	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

CMF  
11-06-23

W/O:		WORK ORDER CHANGES					
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# Picklist Print

Tuesday, June 07, 2011 11:38:06 AM

Page 1

Work Order ID: 70404

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube



Start Date: 6/7/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A ☐ 07.06.11 ☐ New Issue ☐ EC  
IPP Rev:B 08-02-22 change to revA as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3492-11 		Manufactured	No			250	Each	0.0000	2	2			
Plug													
D3492-13 		Manufactured	No			250	Each	45.0000	6	6			
Plug													
<div> <div>Location</div> <div>FP-B</div> <div>46693</div> </div> <div> <div>Loc Qty</div> <div>45</div> <div>45</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> </div>													
D3492-9 		Manufactured	No			250	Each	51.0000	2	2			
Plug													
<div> <div>Location</div> <div>FP-A</div> <div>46694</div> </div> <div> <div>Loc Qty</div> <div>51</div> <div>51</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> </div>													
D2962-150 		Manufactured	No				Each	85.0000		1			
3.540 Outer Tube, Extrut													
<div> <div>Location</div> <div>HALL</div> <div>28672</div> <div>59934</div> </div> <div> <div>Loc Qty</div> <div>85</div> <div>12</div> <div>73</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> <div></div> </div>													

B70410



(x2) 11/06/22



11/06/22

x6



11/06/22

x2



① DP 11-6-8

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Parent Item Name: Replacement Skidtube

Start Date: 6/7/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

D2964

Manufactured No

140 Each

25.0000

1 1



Cap



BE 11/06/21

Location

Loc Qty

Loc Code

LG002

25

14101

10

64654

15

1

D2971

Manufactured No

190 Each

20.0000

1 1



Cross Bolt Spacer



BE 11/06/22

Location

Loc Qty

Loc Code

LG001

20

44445

20

4

D3584-1

Manufactured No

190 Each

0.0000

1 1



Web



BE 11/06/21  
B 7/10/25

D2973

Manufactured No

190 Each

145.0000

2 2



Cross Bolt Spacer



BE 11/06/22

Location

Loc Qty

Loc Code

LG002

145

14636

145

2

D3662-3

Manufactured No

190 Each

20.0000

1 1



Crossbolt Spacer



BE 11/06/22

Location

Loc Qty

Loc Code

LG001

20

44456

20

1

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Start Date: 6/7/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

D3662-1 Manufactured No 190 Each 16.0000 3 3  
Crossbolt Spacer

Location

Loc Qty

Loc Code

LG001

16

64451

16

3

ALS4-1032-130 Purchased No 240 Each 1,850.000 36 36  
Insert

Location

Loc Qty

Loc Code

ST281

8

117331

8

ST282

1842

117717

1842

x36

ALS4-428-165 Purchased No 240 Each 535.0000 2 2  
Inserts

Location

Loc Qty

Loc Code

FP

490

117769

490

FP-B

45

114172

45

x2

D2965 Manufactured No 250 Each 31.0000 1 1  
Cap, 105 Skidtube

Location

Loc Qty

Loc Code

FP006

31

52057

31

x1

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Shop Packet Print

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Tuesday, June 07, 2011 11:38:07 AM

Page 4

Work Order ID: 70404

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 6/7/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

D3508-3

Manufactured No

250

Each

9.0000

1

1



Wearplate



*HL 11/06/22*

Location

Loc Qty

Loc Code

FP021

9

38527

1

65192

1

67489

7

*XL*

D3508-9

Manufactured No

250

Each

2.0000

1

1



Wearplate



*HL 11/06/22*

Location

Loc Qty

Loc Code

FP021

2

B70307

65193

2

*VL*

D3558-3

Manufactured No

250

Each

12.0000

1

1



Gasket



*HL 11/06/22*

Location

Loc Qty

Loc Code

FP014

12

67486

12

*VL*

D3558-9

Manufactured No

250

Each

9.0000

1

1



Gasket



*HL 11/06/22*

Location

Loc Qty

Loc Code

FP014

9

55469

9

*XL*

Tuesday, June 07, 2011 11:38:07 AM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, June 07, 2011 11:38:07 AM

Work Order ID: 70404

Parent Item: D117-762-041











Parent Item Name: Replacement Skidtube

Start Date: 6/7/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

D3558-11	Manufactured	No	250	Each	3.0000	1	1									
							<u>HL 1106122</u>									
Gasket																
<table><tr><th><u>Location</u></th><th><u>Loc Qty</u></th><th><u>Loc Code</u></th></tr><tr><td>FP014</td><td>3</td><td></td></tr><tr><td>62885</td><td>3</td><td>B70312</td></tr></table>								<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	FP014	3		62885	3	B70312
<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>														
FP014	3															
62885	3	B70312														
D3558-13	Manufactured	No	250	Each	28.0000	1	1									
							<u>HL 1106122</u>									
Gasket																
<table><tr><th><u>Location</u></th><th><u>Loc Qty</u></th><th><u>Loc Code</u></th></tr><tr><td>FP014</td><td>28</td><td></td></tr><tr><td>59558</td><td>28</td><td></td></tr></table>								<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	FP014	28		59558	28	
<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>														
FP014	28															
59558	28															
D3508-11	Manufactured	No	250	Each	12.0000	1	1									
							<u>HL 1106122</u>									
Wearplate																
<table><tr><th><u>Location</u></th><th><u>Loc Qty</u></th><th><u>Loc Code</u></th></tr><tr><td>FP016</td><td>12</td><td></td></tr><tr><td>69941</td><td>12</td><td></td></tr></table>								<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	FP016	12		69941	12	
<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>														
FP016	12															
69941	12															
D3508-13	Manufactured	No	250	Each	6.0000	1	1									
							<u>HL 1106122</u>									
Wearplate																
<table><tr><th><u>Location</u></th><th><u>Loc Qty</u></th><th><u>Loc Code</u></th></tr><tr><td>FP016</td><td>6</td><td></td></tr><tr><td>65191</td><td>6</td><td></td></tr></table>								<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	FP016	6		65191	6	
<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>														
FP016	6															
65191	6															
AN960JD10L	Purchased	No	250	Each	0.0000	2	2									
							<u>HL 1106122</u>									
Washer																

Tuesday, June 07, 2011 11:38:08 AM

Shop Packet Print

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, June 07, 2011 11:38:08 AM

Work Order ID: 70404



Parent Item: D117-762-041



Parent Item Name: Replacement Skidtube

Start Date: 6/7/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C4A

Purchased

No

250

Each

2,157.000

28

28



BOLT



JL 11/06/12

LocationLoc QtyLoc Code

ST350

2157

117094

655

117313

2

117688

800

117795

500

117872

200

x28

AN3C5A

Purchased

No

250

Each

1,779.000

2

2



Bolt



JL 11/06/12

LocationLoc QtyLoc Code

FP-A

7

115835

7

ST350

1772

116419

118

116549

54

117343

500

117508

300

117764

300

117872

500

x2

AN960JD416L

NAS1149D0416J

Purchased

No

250

Each

3.0000

2

2



Washer



JL 11/06/12

LocationLoc QtyLoc Code

FP-B

3

110153

3

x2

Tuesday, June 07, 2011 11:38:08 AM

Shop Packet Print

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, June 07, 2011 11:38:08 AM

Work Order ID: 70404

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 6/7/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

AN960C10L NAS1149C0332 Purchased

No

250

Each

0.0000

28

28



washer

AN4-4A

Purchased

No

250

Each

102.0000

2

2



Bolt

Location

Loc Qty

Loc Code

FP-B

48

114615

48

ST356

54

114615

54

NAS1611-012

Purchased

No

250

Each

68.0000

6

6



O-RING

Location

Loc Qty

Loc Code

FP-A

68

113845

68

NAS1611-015

Purchased

No

250

Each

91.0000

2

2



O-RING

Location

Loc Qty

Loc Code

FP-A

91

115101

91

M116081

K2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Page 8

Tuesday, June 07, 2011 11:38:08 AM

Work Order ID: 70404



Parent Item: D117-762-041



Parent Item Name: Replacement Skidtube

Start Date: 6/7/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1611-016

Purchased

No

250

Each

109.0000

2

2



u106522

O-RING

Location

Loc Qty

Loc Code

FP-A

109

107178

7

112492

58

113524

44

x2

Tuesday, June 07, 2011 11:38:08 AM

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Page 8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

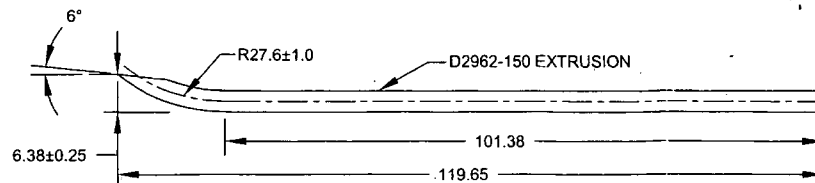
**NOTE:** Date & initial all entries

# PARTS LIST FOR D3582-041 SKIDTUBE ASSEMBLY

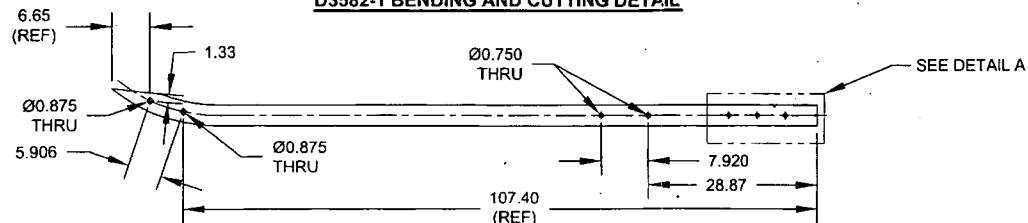
Qty	Part Number	Description
X	D3582-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2964	CAP
1	D2965	CAP
1	D2971	CROSS BOLT SPACER
2	D2973	CROSS BOLT SPACER
2	D3492-049	PLUG ASSEMBLY
2	D3492-051	PLUG ASSEMBLY
6	D3492-053	PLUG ASSEMBLY
1	D3508-3	WEARPLATE
1	D3508-9	WEARPLATE
1	D3508-11	WEARPLATE
1	D3508-13	WEARPLATE
1	D3558-3	GASKET
1	D3558-9	GASKET
1	D3558-11	GASKET
1	D3558-13	GASKET
1	D3584-1	WEB
3	D3662-1	CROSS BOLT SPACER
1	D3662-3	CROSS BOLT SPACER
36	AELS-1032-130	INSERT
2	ALS7-428-165	INSERT
28	AN3C4A	BOLT
2	AN3-5A	BOLT
2	AN4-4A	BOLT
28	AN960C10L	WASHER
2	AN960JD10L	WASHER
2	AN960JD416L	WASHER

## GENERAL NOTES:

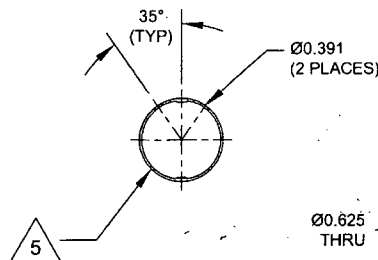
- ALL DIMENSIONS ARE IN INCHES
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- WELDING TO BE DONE PER DART QSI 004.
- INSERT D3584-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- USE DART DRILL TEMPLATE DT8900 TO LOCATE AND DRILL  $\varnothing 0.297$  HOLES (36 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION G-G (36 PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/-291.
- DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED LOCATIONS.
- FINISH:
  - CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3584-1 WEB.
  - POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3.
  - ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4



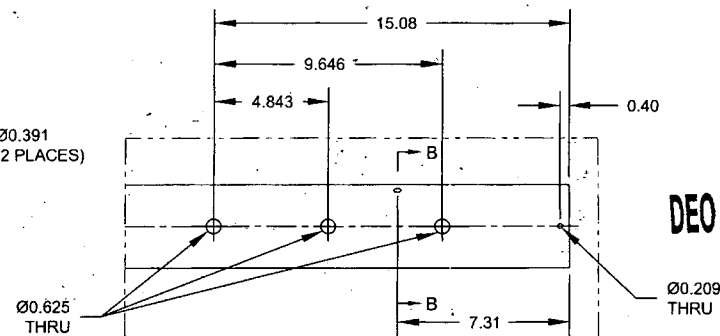
D3582-1 BENDING AND CUTTING DETAIL



D3582-1 DRILLING DETAIL



SECTION B-B  
SCALE 1:5



DETAIL A  
SCALE 1:5

DEO ATTACHED

RELEASED  
07-11-2007

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 70404  
07-11-06-7

A	NEW ISSUE	PH	07.06.08
REV.	DESCRIPTION		BY DATE
DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	PH	PORT HADLOCK, WA	
CHECKED	PH	DRAWING NO.	REV. A
MFG. APPR.	PH	D3582	SHEET 1 OF 2
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	BK 117 SKIDTUBE ASSEMBLY	1:20
DATE	07.06.08	COPYRIGHT © 2007 BY DART AEROSPACE USA, INC	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

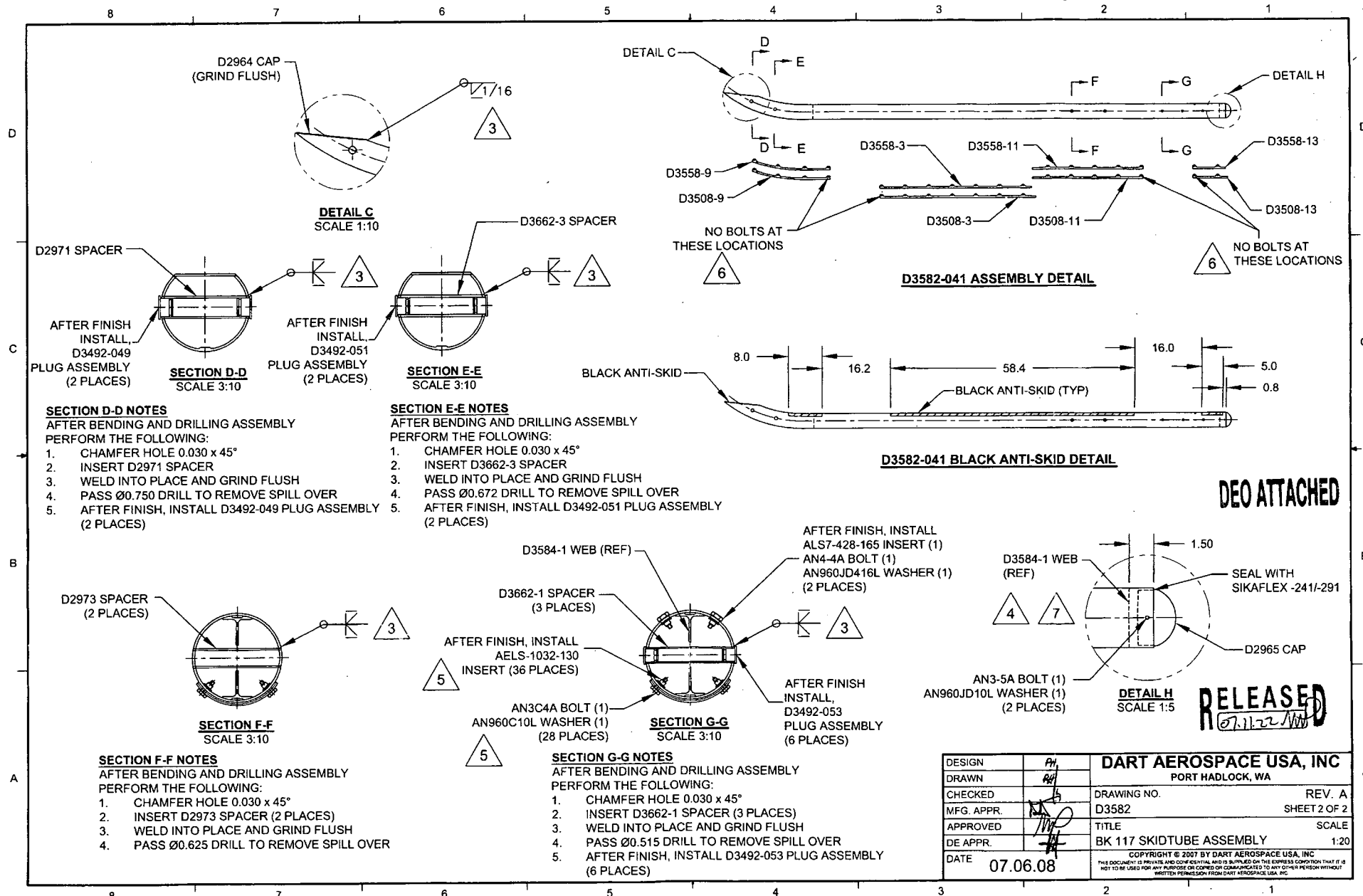
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

u/o 10409



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

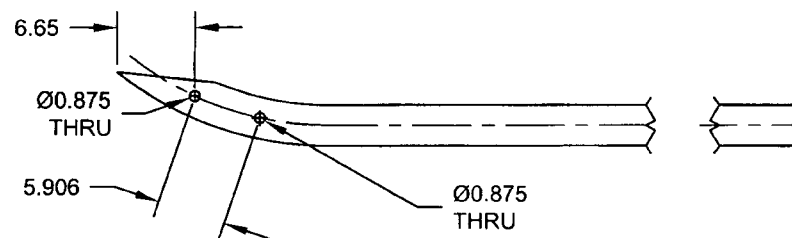
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

DRAWING NO. D3582	TITLE BK 117 SKIDTUBE ASSEMBLY	REV. A	DART AEROSPACE USA, INC ENGINEERING ORDER		D.E.O. NO. D3582-A-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>PH</i>	CHECKED <i>B</i>	MFG. APPR. <i>E</i>	APPROVED <i>MD</i>		DE APPR. <i>MD</i>		
DATE 09.04.06	DATE 04.04.06	DATE 09.04.06	DATE 09/24/06		DATE 09.04.06		

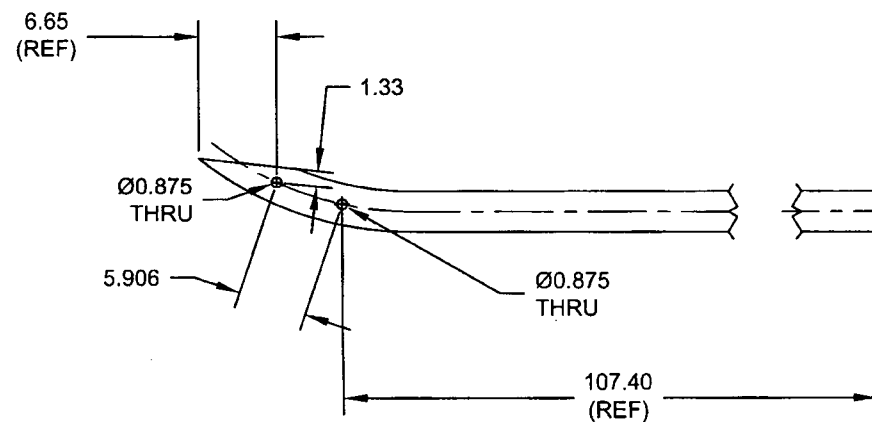
FOR EASE OF MANUFACTURE AND TO ENSURE THE FIT OF BRISTOL WIRESTRIKE SKID GEAR DEFLECTOR:  
UPDATE DIMENSIONING OF 2 FWD HOLES ON SHEET 1 AS SHOWN

**IS:**



*26 70409*

**WAS:**



**RELEASED**  
09/04/22 *MD*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



NO. 245

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job number: 65186  
Part number: D117-762-041  
Description: 17 skid tube  
Welding Process: Tig[☒] Mig[ ]  
Base material: aluminum  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[ ]  
Penetration: pass[☒] fail[ ]

UNACCEPTABLE

Cracks: pass[☒] fail[ ]  
Undercut: pass[☒] fail[ ]  
Pin holes: pass[☒] fail[ ]  
Overlap (cold lap): pass[☒] fail[ ]  
Porosity (surface): pass[☒] fail[ ]  
Coloration: pass[☒] fail[ ]

Qualifier Sal Lums Date of Test Coupon 11-01-31

Welder Barclay Elliott Date of Test Coupon 11-01-31

The above named individual is qualified in accordance with AWS D17.1.2001 to weld